



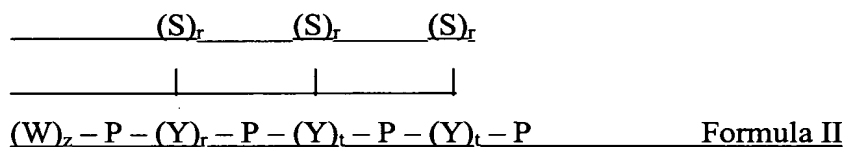
 is 0 to 2

n is 0 to 3

m is 0 to 3

wherein if n = 0 then m > 0; wherein if m = 0 then n > 0; wherein if q is 1, r is 1, and if q is > 1
at least one of Y is sulfated; and further wherein the antibody, antigen-binding fragment
thereof, or complex thereof comprises a first hypervariable region comprising SEQ ID NO:
20.

Claim 19. (currently amended) A human ~~A~~ antibody, antigen-binding fragment thereof, or
complex thereof comprising at least one antibody or antigen-binding fragment thereof,
wherein the antibody, antigen-binding fragment thereof, or complex thereof is capable of
binding to or cross reacting with the an isolated epitope of claim 5 comprising the formula



Wherein:

W is any amino acid other than Aspartate and Glutamate

Y is an amino acid selected from the group consisting of Tyrosine, Asparagine, Serine
and Threonine

P is independently selected from (A)_m(A)_n(X)_u or (X)_u(A)_n(A)_m or (A)_n(X)_u(A)_m
or (A)_n(A)_m(X)_u or (X)_u(A)_m(A)_n or (A)_m(X)_u(A)_n

S is a sulfate or a sulfated molecule

X is any amino acid except Aspartate, Glutamate or Tyrosine

A is independently selected from the group consisting of any negatively charged
amino acid, leucine, isoleucine, proline, phenylalanine, serine, and glycine

z is 0, 1, or 2

r is 0 or 1

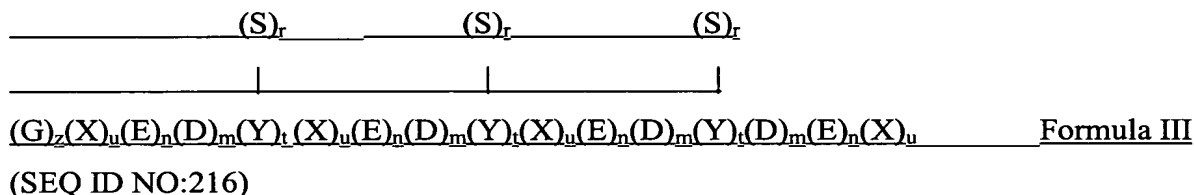
t is 1, 2 or 3

u is 0 to 2

n is 0 to 3

m is 0 to 3
wherein if n =0 then m > 0; wherein if m = 0 then n > 0; wherein at least one Y is sulfated;
and further wherein the antibody, antigen-binding fragment thereof, or complex thereof
comprises a first hypervariable region comprising SEQ ID NO: 20.

Claim 20. (currently amended) A human ~~An~~ antibody, antigen-binding fragment thereof, or complex thereof comprising at least one antibody or antigen-binding fragment thereof, wherein the antibody, antigen-binding fragment thereof, or complex thereof is capable of binding to or cross reacting with the an isolated epitope of claim 9 comprising the formula



Wherein:

G	is Glycine
E	is Glutamate
D	is Aspartate
Y	is Tyrosine
S	is sulfate or a sulfated molecule
X	is any amino acid except glycine, glutamate, aspartate and tyrosine
z	is 0, 1, or 2
t	is 1, 2 or 3
r	is 0 or 1
u	is 0 to 2
n	is 0 to 3
m	is 0 to 3

wherein at least one Y is sulfated; wherein if n = 0 then m > 0; wherein if m = 0 then n > 0;
and further wherein the antibody, antigen-binding fragment thereof, or complex thereof
comprises a first hypervariable region comprising SEQ ID NO: 20.